- 1. Source of raw materials.
- 2. Slag recovery process and type of collection equipment.
- 3. Slag properties and past variability's.
- 4. Storage facilities.
- 5. Frequency and results of suppliers quality control testing program.

<u>b. Acceptance</u> The approval of slag we will be based on comparative testing performed by the department on samples obtained from storage silos located at the redi-mix concrete plants.

Samples will be obtained for testing during the annual plant inspection. Further sampling will be on a per project basis at a frequency to be determined by the department.

<u>c. Quality Control</u> The quality control procedures employed by the supplier shall be such that only slag conforming to this Section is presented to the department for acceptance consideration.

SECTION 702 - BITUMINOUS MATERIAL

702.01 Asphalt Cement Performance Graded Asphalt Binder shall conform to the requirements of AASHTO M 320.

702.03 Cutback Asphalt AASHTO M82.

<u>702.04 Emulsified Asphalt</u> AASHTO M140. Cationic emulsified asphalt shall conform to AASHTO M208.

702.05 Temperature Application Range, °C [°F]

Type and Grade of Material	Spray	Mix	
RC 70 150]	27 to 66 [80 to 150]	27 to 66 [80 to	
RC 250	28 to 79 [82 to 175]	27 to 66 [80 to	

150]						
RC 800	71 to 107 [160 to 225]	57 to 85 [135 to				
185]						
RC 3000	93 to 135 [200 to 275]	85 to 107 [185 to				
225]	10 . 40 550 . 100	10 . 40 570 .				
MC 30	10 to 49 [50 to 120]	10 to 49 [50 to				
120] MC 70	27 to 66 [80 to 150]	27 to 66 [90 to				
150]	27 to 66 [80 to 150]	27 to 66 [80 to				
MC 250	38 to 93 [100 to 200]	38 to 99 [100 to				
210]	20 to 92 [100 to 200]	30 10 37 [100 10				
MC 800	85 to 127 [185 to 260]	93 to 121 [200 to				
250]						
MC 3000	109 to 135 [230 to 275]	93 to 121 [200 to				
250]						
All emulsions	10 to 71 [50 to 160]	10 to 71 [50 to				
160]						
Performance Graded	As required to					
achieve						
Asphalt Binder	a viscosity of					
all grades)	0.15 to 0.31 PA-s.					

<u>702.06 Temperature - Volume Correction Tables</u> All asphalt material shall be corrected for volume by use of the following multipliers to reduce the volume at the observed temperature to the volume at 16° C [60° F].

EMULSIFIED		ASPHALTS			ASPHALTS			ASPHALTS	
ASPHALTS		(from ASTM			(from ASTM			(from ASTM	
		D1250)			D1250)			D1250)	
All Types	T	Group0	Group1	T	T Group0Group1		T	Group0	Group1
and Grades	$^{\circ}C$	Sp.	Sp.	$^{\circ}C$ [$^{\circ}F$]	Sp.	Sp.	°C [°F]	Sp.	Sp.
	$[^{\circ}F]$	Grave.	Grave.		Grave.	Grave.		Grave.	Grave.
		0.966+	0.850		0.966+	0.850		0.966+	0.850
			0.966			0.966			0.966
1	10	1.0035	1.0040	66	.9689	.9647	121	.9352	.9268
	[50]			[150]			[250]		

1			1.0020					.9336	.9249
1.0000	16	1.0000		71	.9655	.9609	127	.9319	.9231
.9988	18	.9983	.9980	74	.9638	.9589	129	.9302	
.9975	21	.9965		77	.9621	.9570	132	.9286	
.9962								.9269	.9175
.9950			.9921						.9157
.9938	29	.9913	.9901	85	.9570	.9513	141	.9236	.9138
.9925	32	.9896		88	9553	.9494	143	.9220	.9120
.9912	35	.9878		91	.9536	.9475	146		.9102
.9900									.9083
.9988		.9844	.9822		.9503				.9065
.9875					.9486	.9418		.9154	.9047
.9862		.9809				.9399		.9138	.9029
.9850		.9792	.9763		.9452	.9380		.9122	.9010
.9338	52 [125]	.9775	.9744	107 [225]	.9436	.9361	163 [325]	.9105	.8992
.9825	54 [130]					.9343		.9089	.8974
.9812	57 [135]	.9740			.9402	.9324		.9073	.8956

.9800	60	.9723	.9686	116	.9385	.9305	171	.9057	.8938
	[140]			[240]			[340]		
.9788	63	.9706	.9666	118	.9369	.9286	174	.9040	.8920
	[145]			[245]			[345]		
.9775	66	.9689	.9647	121	.9352	.9268	177	.9024	.8902
	[150]			[250]			[350]		

702.09 Asphalt Filler for Structural Plate Arches Asphalt for filling spaces between the structural plates and the substructure metal connectors of the arch shall conform to the requirements for bituminous material of AASHTO M190 or of AASHTO M320, Table 1, for PG 64-28.

702.12 Emulsified Asphalt Sealing Compound Emulsified asphalt sealing compound shall be an approved commercially prepared product manufactured for specific protective coating, colored as required. It shall contain fillers, pigments and sand or fibrous materials suspended in a suitable emulsified asphalt or tar. It shall be of such consistency that it can be applied at atmospheric temperatures and capable of being easily diluted with the addition of water and mixed by hand stirring at the site of application.

SECTION 703 - AGGREGATES

703.01 Fine Aggregate for Concrete Fine aggregate for concrete shall consist of natural sand or, when approved by the Resident, other inert materials with similar characteristics or combinations thereof, having strong, durable particles. Fine aggregate from different sources of supply shall not be mixed or stored in the same pile nor used alternately in the same class of construction or mix without permission of the Resident.

All fine aggregate shall be free from injurious amounts of organic impurities. Should the fine aggregate, when subjected to the colorimetric test for organic impurities, AASHTO T21 (ASTM C40), produce a color darker than the reference standard color solution (laboratory designation Plate III), the fine aggregate shall be rejected.

The fine aggregate shall be well graded from coarse to fine material and shall meet the following grading requirements when tested according to AASHTO T11 and AASHTO T27.

Sieve Designation

Percentage by Weight Passing Square Mesh Sieves